#### EXHIBIT

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#### Invalidity Claim Chart for U.S. Patent No. 10,779,033 ("the '033 patent") **Exhibit 033-3**

MDx/Lounge server) and screens ("the YT Remote System") was described in a printed publication, or in public use, on sale, sold, known in this YouTube Remote and YouTube Leanback ("YouTube Remote"), including the YouTube Remote application and associated servers (e.g., country, or otherwise available to the public before the priority date of the '033 patent.

smartphones.... Available in the Android Market now"). Features of the YouTube Remote would have been apparent to a person of ordinary skill in Google also prior art under at least § 102(a), (b) and (g) prior art. See https://web.archive.org/web/20120323165536/http://www.appbrain.com/app/youtubeexample, Google conceived of the Party Mode feature by November 2010. See, e.g., GOOG-SONOSNDCA-00075580 at -4274 (referring to launch the art using the public systems, rendering the systems themselves Prior to Sonos's effective priority date (December 30, 2011) and Sonos's alleged remote/com.google.android.ytremote (see change log describing Version 2.07, 3.0.1 and 3.1.0); see also Dkt. No. 211-14 (January 2012 release of mode" for Version 2.0.7). Google also diligently released additional updates for the YouTube Remote that contain the party mode feature and are market for leanback ("Google Nov. 9 launched YouTube Remote to let U.S. users control the YouTube Leanback application from their Android https://web.archive.org/web/20110822085859/http://www.appbrain.com:80/app/youtube-remote/com.google.android.ytremote\_treferring to "party" management/youtube-remote-comes-to-android-market-for-leanback/ https://www.eweek.com/it-management/youtube-remote-comes-to-androidof Version 1 of the YouTube Remotel, -4274 (lidentifying "party/family mode" as a "plan[] for the future 1); GOOG-SONOS-NDCA-00086353 showing testing of "party mode" by at least June 2011, GOOG-SONOS-NDCA-00108594 (describing party mode), GOOG-SONOSWDTXhereafter diligently reduced to practice the Party Mode feature and launched it no later than July of 2011 as part of Version 2 of the YouTube nvention date (July 15, 2011), Google conceived of and diligently reduced to practice a "Party Mode" feature for the YouTube Remote. For Remote. GOOG-SONOSNDCA-00075593 ("Party Mode... Launched in the version 2 of the remote."); GOOG-SONOS-NDCA-00113784 YouTube Remote Control – Roadmap referring to "party mode" and implementation of such high priority feature no later than "Q2 2011" For example, the The YouTube Remote was available a first released no later than November 9, 2010. https://www.eweek.com/itemote/com.google.android.ytremote (change log showing YouTube Remote Version 2.03 was released by July 29, 2011); 00052947 (same); see also https://web.archive.org/web/20120323165536/http://www.appbrain.com/app/youtube-Version 3.1.0).

of multimedia content selected for playback." Dkt. No. 316 at 5. Under the Court's construction of "playback queue" and Sonos's interpretation of a In its recent August 2, 2022 order granting Google's Motion for Summary Judgment, the Court construed the term "playback queue" to mean "a list "remote" playback queue, the YouTube Remote with Party Mode anticipates or at least renders obvious the asserted claims of the '033 patent

See also Google's 7-12-2011 capture of YouTube Remote source code (in 2022-03-22 YTRemoteLeanbackAppsServer07122011 including Party Mode feature.

At least the following documents describe the functionality of the YT Remote System:

- [1]https://youtube.googleblog.com/2010/11/control\_youtube\_on\_desktop\_or\_tv\_with.html https://youtube.googleblog.com/2010/11/controlyoutube-on-desktop-or-tv-with.html, By Kuan Yong, Senior Product Manager, Nov.09.2010
  - yngQ https://www.youtube.com/watch?v=txIPVu6yngQ, posted Nov 9, 2010
- [3] "Remote Screen pairing implementation"
- [4]https://www.youtube.com/watch?v=EGdsOslqG2s https://www.youtube.com/watch?v=EGdsOslqG2s, Nov 14, 2010
- [5] https://lifehacker.com/remote-control-youtube-on-your-tv-or-computer-from-your-5685752 https://lifehacker.com/remote-control-youtube youtube on your tv or computer from your 5685752, Nov 9, 2010
- [6] YouTube Lounge Youbiquity Presentation
- [7] MDx protocol as of 2011, as evidenced by MDx Protocol v2 (12/21/11 at 8:06am)
- [9] https://web.archive.org/web/20111014181427/https://market.android.com/details?id=com.google.android.ytremote
- [10] https://palblog.fxpal.com/?p=4953, Lean back with YouTube and Android by Surendar Chandra, November 11, 2010 (available athttps://web.archive.org/web/20111106221315/https://palblog.fxpal.com/?p=4953
- https://web.archive.org/web/20111106221315/https://palblog.fxpal.com/?p=4953)
- [11] Engadget Article, YouTube Remote app released, controls Leanback on GTV or PC from your Android phone, November 9, 2010
  - 12] GOOG-SONOS-NDCA-00075593
- 131 GOOG-SONOS-NDCA-00108594

Google also relies on Google source code, both server-side code and device-side code, including any written source code, source code in production, and released source code, including the exemplary code paths and citations referred to below. Google expressly reserves the right to rely on additional source code at a later time. 12

Google has made available for inspection and cited in this charts chart versions of the source code for the YouTube remote that predate the December 30, 2011 priority date that Sonos identified in its invalidity contentions. Google is also making available for inspection earlier versions. agree that Sonos is entitled to its alleged invention date, to the extent Sonos is entitled to such date Google and may rely upon the same or similar code YouTube Remote source code in this chart. However, that predate Sonos's alleged invention date of July 15, 2011. While Google does not including a July 12 and December 1, 2011 version of the source code from. Because Sonos alleges a July 15, 2011 invention date for the '033 patent, Google cites to the July 12, 2011, including Version 1, capture of the LeanBack code and its corresponding application and server functionality in the earlier December 1, 2011 source code.

Google identifies the authors, designers and implementers of the documents and source code identified and cited herein as prior inventors for purposes of Section 102(g), including but not limited to Ramona Bobohalma. To the extent publicly available, these documents themselves are also each individually prior art under § 102(a), (b) or (e) and § 103 based on their dates of publication and public availability. To the extent it is argued the YT Remote System does not disclose any element, that element would be obvious based on the state of the art and/or in combination with one or more of the references noted in Riders I-K.

infringement contentions as understood by Google, as well as the plain and ordinary meaning of the claim terms. This chart should not be construed To avoid duplication and cumulative excerpts, exemplary quotations and citations are provided. The citations to portions of any reference in this accompanying text. Additional support can be found elsewhere in the prior art reference, and Google expressly reserves the right to rely on such chart are exemplary only. Google reserves the right to use the entirety of any reference cited in this chart to show that the asserted claims are anticipated and/or obvious, or to show the state of the art at the relevant time. References to figures should be understood to also refer to any as consenting to or agreeing with Sonos' construction of claim terms. Because discovery is ongoing, Google reserves all rights to amend its other support and passages at a later time. The use of claim terms in the below chart is based on Sonos' construction of claim terms in its invalidity contentions based on new information produced in discovery.

Google expressly reserves the right to supplement its invalidity contentions, including this chart, to demonstrate that the prior art invalidates the claims of the '033 patent.

Claim 1 Portion	Claim 1 Claim 1 Text Portion	YT Remote System
[IPre]	A computing device comprising: at least one processor; a non-transitory computer-readable medium; and program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising:	YT Remote System discloses a computing device (e.g. a phone or computer) having at least one processor, a non-transitory computer readable medium that, when executed by the at least one processor, cause the computing device to perform the recited functions.  See e.g. [1]: "YouTube Remote creates a virtual connection between your phone and YouTube Leanback. To 'pair' your phone with your Leanback screen, simply sign into YouTube Remote on your Android phone, and to YouTube Leanback on your Google TV or computer with the same YouTube account. Just like that, you've connected your powerful multi-touch Android screen with the biggest screen in your home. Once connected, you can use the rich browse and discovery interface on YouTube Remote to find and queue up videos to watch, and send them all to Leanback with a single tap. With

YouTube Remote you can play, pause, skip forward and back and even control the sound volume."

See e.g. [5]



Android: YouTube Remote is a free remote control tool that links convenience of having a touch-screen remote and playlist builder the full-screen experience of YouTube Leanback with the on your Android device. See also [7] e.g. Sample Session, Remote to Server and Remote to Screen messages

See e.g. [8] at 1:39-50:

networked device. Such as a network-enabled television, and web-enabled device, Such as a In general, this disclosure is directed to techniques for exchanging information between a enabled device can transmit control information via the network service to the networked remote control, via a network service (e.g., a "cloud service"). In an example, the webdevice to control playback of media content (e.g., audio and/or video content) on the networked device. In

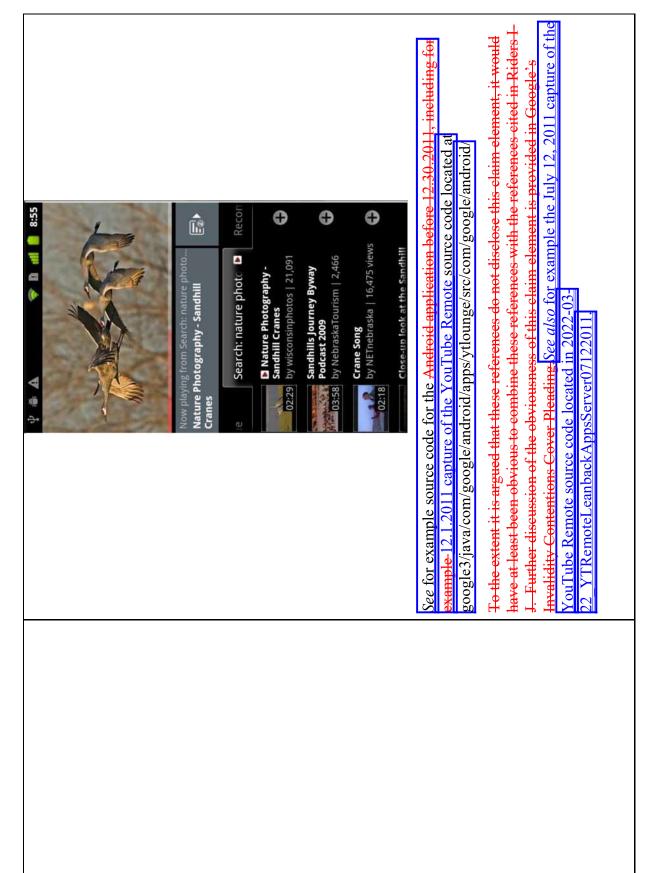
another example, the networked device can transmit content information via the network service to the web-enabled device. Such as status information concerning the networked

*See also* [8] at 3:14-55:

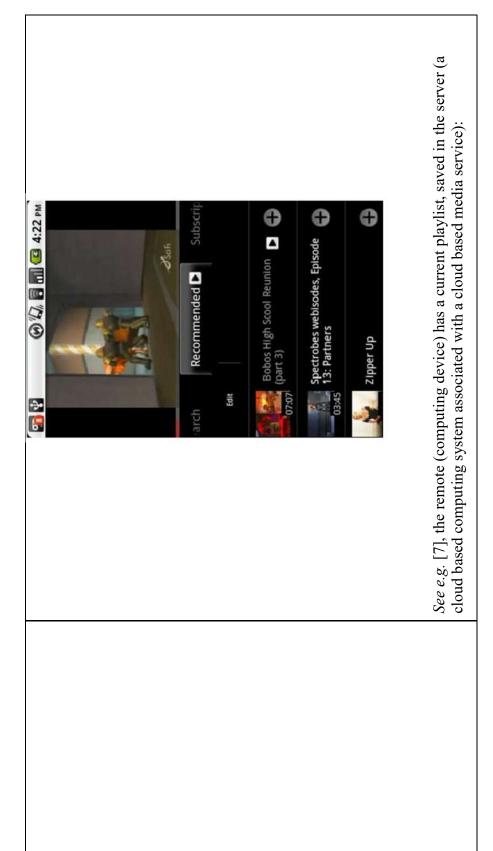
network service may receive commands from a remote control and transmit the commands information from the controlled device and transmit those commands or other information Techniques of this disclosure relate to a network service or "cloud service' that acts as an intermediary between a remote control device and a controlled device. For example, the executing on a mobile device. Such as a cellular telephone or a tablet computer. The commands, Such as an Internet-connected television, a set top box, a personal video to the remote control. The remote control may include a remote control application controlled device may include any Internet-connected device capable of receiving to a controlled device. The network service may also receive commands or other

controlled device. In general, the remote control and the controlled device are configured to network service then determines the controlled device that is paired with the remote control and the controlled device may operate as simple Hypertext Transfer Protocol HTTP clients controls and controlled devices. The network service may direct received information and accomplish the task, the remote control first sends a message to the network service. The recorder, a gaming console, or other net worked device. In one aspect, the remote control remote control. Thus, any HTTP-enabled device may operate as a remote control or as a of the network service. That is, the controlled device does not operate as a server to the network service. A remote control may be configured to send a message to a controlled controlled devices or changing the media content playing on the controlled devices. To remote controls and controlled devices, and sends information or commands to remote commands to the appropriate devices based on pairing information maintained by the controls and one or more controlled devices, receives information or commands from and forwards the message to the appropriate controlled device. The controlled device device to perform a task, Such as stopping playback of media content playing on the both listen for messages from the network service and send messages to the network service. In some examples, the network service controls pairing one or more remote receives the message from the network service and performs the task in response to receiving the message.

See e.g. [9]



[1a]	operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service;	YT Remote System discloses the computing device (e.g. a phone or computer) operating in a first mode in which the computing device is configured for playback of a remote playback queue (e.g. a YouTube watch-next queue) provided by a cloud-based computing system (e.g. the MDx server) associated with a cloud-based media service (e.g. a YouTube content server)  See e.g. [5]
		YouTube Remote is a simple but effective remote tool for controlling YouTube Leanback from the comfort of your Android device. One of the best features of YouTube Remote is that it isn't just a remote control device for YouTube Leanback, it's also a compact YouTube viewer.
		You can, for example, preview a video on your Android device before kicking it over to the playlist for your monitor or television. Once you've queued up a video to play on the big screen you can then turn off the remote function and continue to preview and add more videos to the queue.



## Uniform: seamless transition between phone and big screen

- Android phone magically tums into a remote control for the big screen
  - When the user turns off the big screen the viewing experience is transferred to the mobile device

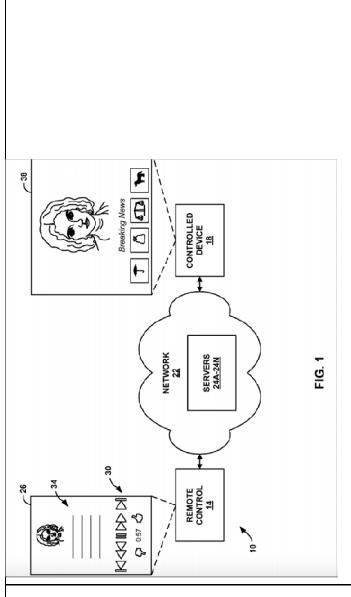
When the user is back home, the experience is again automatically transferred to the big screer



See e.g. [8] at 4:58-67:

network 22. As shown in FIG. 1, according to some examples, remote control 14, controlled FIG. 1 is a block diagram illustrating an example networked environment 10 with a remote disclosure. According to an aspect of the disclosure, remote control 14 communicates with controlled device 18 via network 22 and servers 24A-24N (collectively "servers 24) in control 14 and controlled device 18, in accordance with one aspect of the present device 18, and servers 24 may be distinct components (e.g., physically distinct).

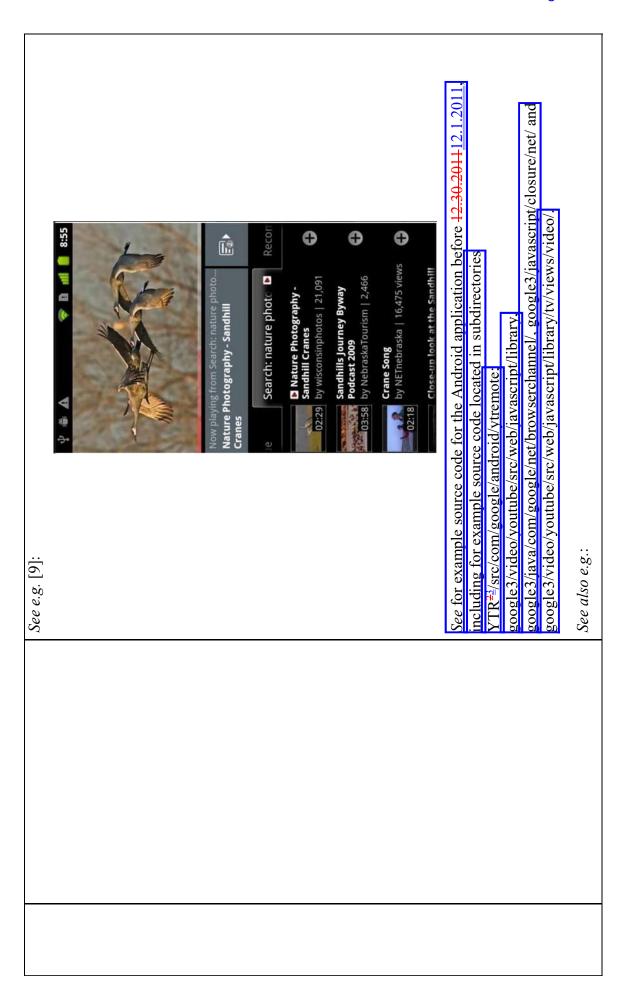
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See e.g. [8] at 8:54-11:6, and Fig. 3

See e.g. [8] at 12:50-65:

between controlled device 118 and one or more servers associated with a network. Network module 136 is configured to transmit data/requests to and receive data/responses from one or more servers via network. Network module 136 may provide received data to processor module may 100 may communicate with one or more servers associated with the network according to a network communication protocol, such as, for example, hypertext transfer communication, and includes appropriate hardware and software to provide wireless or require data from one or more of servers, such as servers 24 shown in FIG. 1. Network In some examples, any application of applications 130 executed by processor 132 may modulators, demodulators, amplifiers, and other circuitry to effectuate communication wired communication. For example, network module 136 may include an antenna, 132 for further processing. Network module 136 may support wireless or wired protocol (HTTP), HTTP secured by transport layer security or secure sockets.



Throughout, "YTR" refers to google3/java/com/google/android/apps/ytlounge/

See, e.g., ytremote/ContactListActivity.java, lines 106 (inviteToParty), 197-208 (onActivityResult), 204 (calls inviteToParty)

e.g., id. at lines 389-432.

ee, e.g., id. at lines 419-423.

ee, e.g., id. at lines 428-430. e.g., id. at lines 424.

See, e.g., ytremote/backend/RealPartyModeManager.java at lines 189-212.

olaylist (or party queue). For instance, the INIT PARTY MODE message sent by the host oarty queue oand the initPartyMode function then sends a INIT PARTY MODE message Thereafter, the guests (should they accept the party invitation) can receive the party queue ARTY INVITE intent. The intent contains the name of the host, the name of the shared nessage to selected guest users for the party. This message contains the name and type of nitPartyMode function<sup>17</sup> sets the lounge session queue (the party queue) to be the queud hat is stored in the cloud. For example, each guest user's YTR application receives the o lounge server  $\square$  This message contains the video queue  $^{12}$ , the current video  $^{13}$ , the The lounge server receives the playlist sent by the host user which it stores as a party The sendInvitations function<sup>19</sup> sends a PARTY INVITE user is received by the YT Lounge server, and its handleMessage function [4] The PARTY INVITE message Plwhich causes the YTR application to issue a current time<sup>14</sup>, and guest name(s)<sup>15</sup>. eceived from the host 18. he party queue<sup>20</sup>

*See, e.g., id.* at line 196.

*See, e.g., id.* at line 21

See, e.g., id. at line 205.

See, e.g., id. at line 207.

<sup>14</sup> See, e.g., id. at line 208.

dee, e.g., id. at line 210.

See youtube/lounge/browserchannel/RealLoungeSessionManager.iava at line 326.

J See, e.g., id. at line 776.

See, e.g., id. at line 946.

See, e.g., id. at line 779-785.

See, e.g., id. at lines 795-796; see also model\PartyQueue.java; backend\RemoteQueueManager.java

See, e.g., ytremote/backend/CloudServiceMessageListener.java at line 137

cy queue, and other information [4] I his intent is serviced by BaseActivity.lava (and a other components) and calls on PartyInvite with the received host and station name [4]	onPartyInvite function <sup>24</sup> calls showInvite <sup>25</sup> . The showInvite function <sup>26</sup> creates a dialog,	partyModeManager.joinParty function is called. The play queue is set as a new video play	e queue), and the YTRemote application connects to the host's lounge 29	to the Lounge server, the addDevice function is called <sup>30</sup> and causes the	send the cloud hosted party queue to the device <sup>31</sup> . The	ODevice <sup>32</sup> calls sendPartyOueueToRemote (for the new remote	ation that has just joined). The sendPartyOueueToRemote <sup>33</sup> sends a	IST MODIFIED message to the remote. This message contains the	16 <sup>34</sup> . The guest YTRemote application receives the	IST MODIFIED message <sup>35</sup> with the shared party queue.
party queue, and oth few other componen	The onPartyInvite for	partyModeManager	state (from remote q	Upon connecting to	Lounge Server to se	<u>sendPartyOueueToL</u>	YTRemote applicati	PARTY PLAYLIST	shared party queue <sup>34</sup>	PARTY PLAYLIST

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See, e.g., id. at line 412.
See, e.g., id. at line 413.

24 See, e.g., id. at line 413.

26 See, e.g., id. at line 460.

See, e.g., id. at lines 463-479
See, e.g., id. at lines 480-491

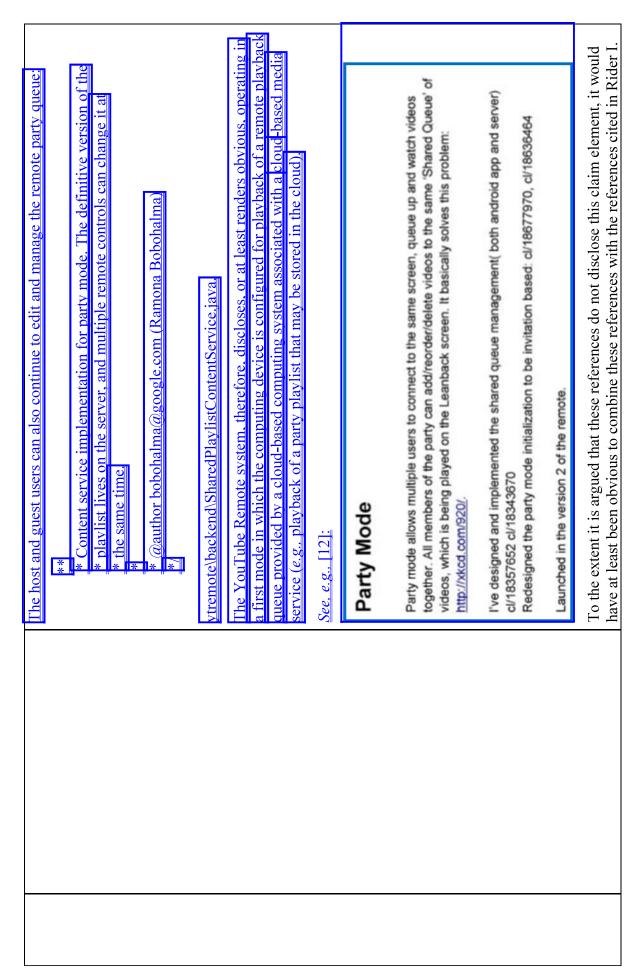
E9 See, e.g., id. at lines 486, 489.

Eq. See, e.g., RealLoungeSessionManager.java, line 237

See, e.g., id. at lines 260-264 See, e.g., id. at line 1065.

e.g., id. at line 1074.

See, e.g., id. at line 1082.
See, e.g., CloudServerMessageListener.java, line 96.



		Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1b]	while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accent playback	The YT Remote System discloses while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue.  See e.g.=[3]
	responsibility for the remote playback queue;	This document describes the implementation details of pairing a mobile device (phone or tablet) with a controlled YouTube Leanback screen. See this document for an overview of what we are doing from a product perspective.
		<ul> <li>pairing code: temporary code used to pair the screen with a mobile device: either manually typed in by the user or scanned from a QR code or sluped via NFC</li> <li>screen id: unique identifier for the screen; never displayed to the user, only sent via https; this number is large enough to be resistant to collision attacks; this is the permanent code that is used by the screen and mobile device to find each other in the cloud</li> <li>lounge token: authentication token constructed based on screen id, used to identify the screen to connect to; gives the requester access to the lounge server session; uses a much larger space than the 64 bit screen id, thus making it invulnerable to collision attacks</li> </ul>
		See e.g. [5]:  To use YouTube Remote you'll need a YouTube account. Your  YouTube login credentials are the glue that binds the Android remote to what's happening on YouTube Leanback. YouTube  Remote is a free application, you can download it by scanning the  QR code at right or searching for "YouTube Remote" in the  Android Market.
		The YT remote identifies devices connected to the same LAN and connected to the same account. See e.g. [4]:

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See e.g. [7]:

Server to Remote messages

olaylistModified(videolds, videold)

oungeScreenConnected()

oungeScreenDisconnected(video\_id, current\_time)

See e.g. [8] at 4:21-57:

and the remote controls and controlled devices may be associated with the user account. For controls and controlled devices unique identification numbers. The network service uses the Upon Scanning the QR code, the remote control may send a message to the network service remote control and pair the remote control with the user account or session identified by the techniques. As one example, a user may maintain a user account using the network service, example, upon connecting to a network service, the remote controls and controlled devices connected to the network. The network service may, in some examples, determine whether unique identification numbers for pairing during a session. In another example, a user may identifies a user account or previously initiated session maintained by the network Service. QR code. In this manner, one or more remote controls may control one or more controlled Remote controls and controlled devices may be paired using any one of several different scans with the remote control (e.g., using a camera of the remote control). The QR code the remote controls and controlled devices are authorized to be associated with the user be presented with a quick response ("OR") code via the controlled device that the user indicating that the network service should assign a unique identification number to the account. If authorized, the network service initiates a session and assigns the remote may notify the network service that the remote controls and controlled devices are devices via the network service.

Using the network service to transmit and receive messages between a remote control and a other. The network service may also enable pairing of a nearly limitless number of remote intermediary, the remote control and the controlled device, in various instances, may not need to be connected to the same local area network, nor in physical proximity to each capabilities to act as a remote control. In addition, by using the network service as an controlled device may enable non-traditional devices having rich input and display controls and controlled devices.

See also [8] at 10:63-11:6; U.S. Patent No. 10,469,894 (continuation of '998 patent), Claim

See e.g. [10]:

"The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers."

See e.g. [11]

not limited to a list of multimedia items selected by the user for playback and need not have

multimedia content selected for playback." The Court indicated that a "playback queue" is

Sonos's interpretation of a "remote" playback queue, the YT Remote System's shared party

multiple media items. At least under the Court's construction of "playback queue" and

playlist (or party queue) is a "remote playback queue." Thus, a phone or tablet running

#### HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

TVF/voutube/tv/services, YTTVF/voutube/players/ YTTVF/voutube/tv/components, Further, on August 2, 2022, this Court construed the term "playback queue" as "a list of See for example source code for the Android application before 12.30.2011 12.1.201 YTTVF/net/browserchannel/, YTR/src/com/google/android/ytremote/backend/, and google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ YTR/src/com/google/android/ytremote; YTTVF/youtube/tv/services; YTR/src/com/google/android/ytremote/adapter, YTTVF<sup>336</sup>/youtube/, Update: Once we got everything rolling, we were able to get a better impression of where it excels is building a up a queue of videos and sending them over all at once. and our favorites list. While the task of pulling up Leanback in a browser window or worked smoothly, scrolling side to side through various queues of types of content even on a Google TV device makes it ill-suited for viewing just one video at a time, continue lagging behind, and without any volume controls or ability to reach other style syncing to be had, if one of them starts to slow down or buffer it will simply It will work on multiple screens at the same time as well, but there's no Airplaygoogle3/video/youtube/src/web/javascript/library/www/remote/ the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it See also e.g.: YTR/src/com/google/android/vtremote/adapter; ncluding for example source code located in subdirectories YTR/src/com/google/android/ytremote/backend/station. zoogle3/video/voutube/src/web/javascript/library/tv/, functions, you'll still need to keep other remotes handy.

Throughout, "YTTVF" refers to YTTVFlashLite12282011/google3/flash/actionscript/com/google/

YouTube Remote Version 2.0 or later with "party mode" also satisfies this limitation under the Court's construction and Sonos' interpretation of a "remote" playback queue.

discloses or renders obvious this limitation by, for instance, displaying the "connect" button playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue. See Bhatacharjee Decl., ¶¶136, 142-143. Thus, the YouTube Remote prior art For instance, the Version 2.0 of the YouTube Remote, like early versions, included a "connect" button that is a representation of one or more playback devices in a media for transfer.

December 1, 2011 source code that was released no later than January of 2012 in Version 3 of one or more playback devices in a media playback system" and that a "device-picker" is To the extent it is argued that the "connect" button is not is not the claimed "representation patent, as the Court found in its August 2, 2022 Order. Bhatacharjee Decl., ¶ 27-34, 165required, this limitation is anticipated and obvious based on the device-picker in Google's YouTube Remote Patent's disclosure of a device-picker, Google's Tungsten/Nexus Q device with device-picker, Apple Airplay, Sonos's own prior art, and/or the Al-Shayk of the YouTube Remote. Bhatacharjee Decl., ¶170. It is also obvious n view of the 174; Dkt. No. 316 at 14-17.

#### See, e.g. [13]:

#### Temporary pairing (party mode)

will make the screen automatically detectable via the network (using UDP), so all the friends will User opens the screen management dialog on their mobile device and click 'share screen'. This see the screen popping up in their screen list. We can optionally protect this sharing with a 2 digit pin, but I personally don't think it's necessary.

In addition, the phone will display a pairing code that can be entered manually, should some devices in the party not be on the same network (e.g. 3G). To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with prior art including the

references cited in Rider J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.	The YT Remote System discloses while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices;  See e.g.: [4], selection of the "Connect" icon by the user		Search Connect	How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views · Nov 14, 2010   ■ 2 ● 4 → SHARE = SAVE · · · · · SAVE · · · ·	See e.g. [8] at 4:21-57:	Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and controlled devices may be associated with the user account. For	example, upon connecting to a network service, the remote controls and controlled devices may notify the network service that the remote controls and controlled devices are	connected to the network. The network service may, in some examples, determine whether the remote controls and controlled devices are authorized to be associated with the user
	while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more	playback devices;						
	[1c]							

controls and controlled devices unique identification numbers. The network service uses the Upon Scanning the QR code, the remote control may send a message to the network service remote control and pair the remote control with the user account or session identified by the identifies a user account or previously initiated session maintained by the network Service. devices having rich input and display capabilities to act as a remote control. In addition, by using the network service as an intermediary, the remote control and the controlled device, unique identification numbers for pairing during a session. In another example, a user may QR code. In this manner, one or more remote controls may control one or more controlled physical proximity to each other. The network service may also enable pairing of a nearly in various instances, may not need to be connected to the same local area network, nor in scans with the remote control (e.g., using a camera of the remote control). The QR code indicating that the network service should assign a unique identification number to the messages between a remote control and a controlled device may enable non-traditional be presented with a quick response ("OR") code via the controlled device that the user devices via the network service. Using the network service to transmit and receive limitless number of remote controls and controlled devices.

See also [8] e.g. at 8:1-59 (Pairing of remote controls with controlled device), 10:63-11:6; U.S. Patent No. 10,469,894 (continuation of '998 patent), Claim

See e.g. [10]

"The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.

Filed 09/04/23

See e.g. [11]

**Update**: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no <u>Airplay</u>style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to keep other remotes handy.

See for example source code for the Android application before 12.30.201112.1.2011

including for example source code located in subdirectories YTR/src/com/google/android/vtremote/, and

google3/video/youtube/src/web/javascript/library/tv/

See also e.g.:

YTR/src/com/google/android/ytremote/adapter; YTR/src/com/google/android/ytremote.

of one or more playback devices in a media playback system" and that a "device-picker" is To the extent it is argued that the "connect" button is not is not the claimed "representation Google's December 1, 2011 source code that was released no later than January of 2012 in Version 3 of the YouTube Remote. Bhatacharjee Decl., ¶170. It is also obvious n view of patent, as the Court found in its August 2, 2022 Order. Bhatacharjee Decl., ¶ 27-34, 165-174; Dkt. No. 316 at 14-17. See also Bhatacharjee Decl., ¶143 (discussing connect button the YouTube Remote Patent's disclosure of a device-picker, Google's Tungsten/Nexus Q required, this limitation is anticipated or at least obvious based on the device-picker in device with device-picker, Apple Airplay, Sonos's own prior art, and/or the Al-Shayk and video fling).<sup>37</sup>

37 2022**-**03-

YTRemoteLeanbackAppsServer07122011/google3/java/com/google/android/apps/ytlounge/src/com/google/android/ytremote/ControlsHelper.jav

at line 267, 349

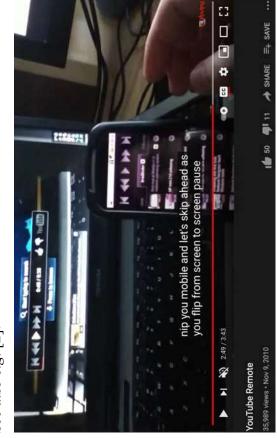
To the extent it is argued that these references do not disclose this claim element, it would references cited in Rider J. Further discussion of the obviousness of this claim element is See e.g.: [4], based on the selection of the "Connect" icon by the user, the leanback screen takes over responsibility for playback of the remote playback queue from the computing The YT Remote System discloses based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for have at least been obvious to combine these references with prior art including the playback of the remote playback queue from the computing device; =+ SAVE provided in Google's Invalidity Contentions Cover Pleading. SHARE \* 100 Connected to Leanback screen How to control Google TV or YouTube Leanback with YouTube Remote OK Go - White Knuckles - Official Video  $\Box$ by OkGo 7401299 views 3,069 views · Nov 14, 2010 device: of the remote playback queue from the take over responsibility for playback transmitting an instruction for the at least one given playback device to based on receiving the user input, computing device, [1d]



*See also e.g.* [2]:

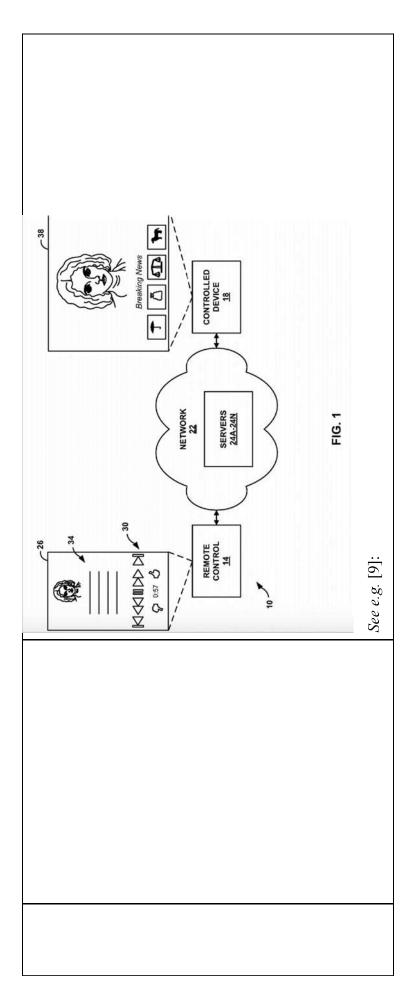
3,069 views • Nov 14, 2010

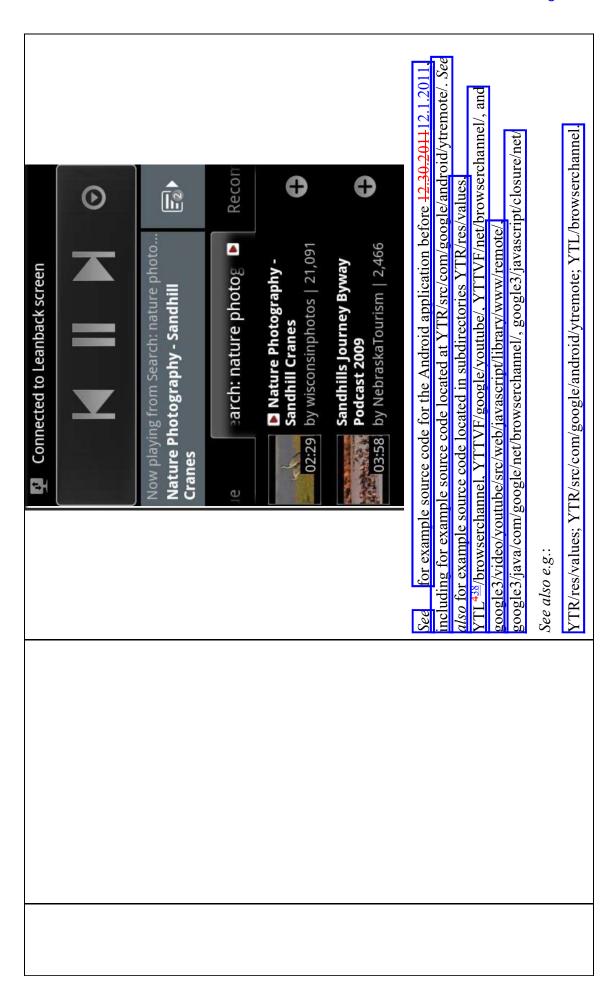
SHARE ≡+ SAVE



See e.g. [7]:

26





438 Throughout, "YTL" refers to google3/java/com/google/youtube/lounge/

Fur	ther, on August 2, 2022, this Court construed the term "playback queue" as "a list of
nm	Itimedia content selected for playback." The Court indicated that a "playback queue" is
not	limited to a list of multimedia items selected by the user for playback and need not have
 nm	Itiple media items. At least under the Court's construction of "playback queue" and
Sor	nos's interpretation of a "remote" playback queue, the YT Remote System's shared
 ed,	urty queue" is a "remote playback queue." Thus, a phone or tablet running YouTube
 Rei	mote Version 2.0 or later with "party mode" also discloses and renders obvious this
 lim	itation under the Court's construction.
 For	For example, the YouTube Remote discloses and renders obvious that upon a user input the
<u>Vol.</u>	uTube Remote application may connect to the host's lounge <sup>39</sup> and send a
SE	T PARTY PLAYLIST message <sup>40</sup> that includes the party queue <sup>41</sup> to the Lounge server.
	is message causes the Lounge server to call the sendPartyOueueToScreen <sup>42</sup> . This
fun	ction sends a SET PLAYLIST and a SET VIDEO message from the Lounge server to
the	screen. The SET PLAYLIST message sent from the Lounge server to the screen
uo3	tains the party queue. See also Bhatacharjee Decl., ¶143 (discussing connect button and
 <u>vid</u>	eo fling).
 See	See, e.g., [12]:

)7122011/google3/java/com/google/android/apps/ytlounge/src/com/google/android/ytremote/ControlsHelper.java at 266, 277 2021-11-30 YTRemoteLeanbackAppsServer-See, e.g., id. at

See, e.g., id. at line 365. 4

2021-11-30 YTRemoteLeanbackAppsServer-42

See, e.g., id. at line 377-381

07122011/google3/java/com/google/youtube/lounge/browserchannel/RealLoungeSessionManager.java at 1088

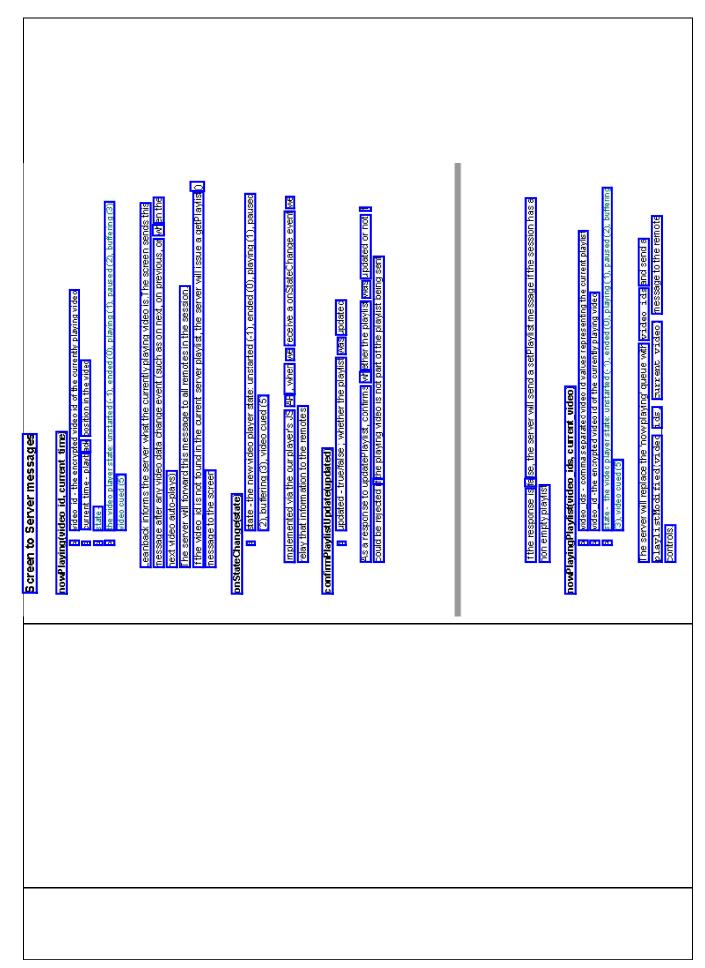
		Party Mode
		Party mode allows multiple users to connect to the same screen, queue up and watch videos together. All members of the party can add/reorder/delete videos to the same 'Shared Queue' of videos, which is being played on the Leanback screen. It basically solves this problem: http://xkcd.com/920/.
		I've designed and implemented the shared queue management( both android app and server) cl/18357652 cl/18343670 Redesigned the party mode initialization to be invitation based: cl/18677970, cl/18636464
		Launched in the version 2 of the remote.
		To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1e]	wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item;	The YT Remote System discloses that the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item;  See e.g. [4], following the instruction from the control device to the Leanback screen, the Leanback screen communicates with the YT cloud-based computing system in order to obtain data identify a next one or more media items in the remote playback queue, retrieving at least one media item (the OK Go – White Knuckles – Official Video) in the remote playback queue, and playing it back.



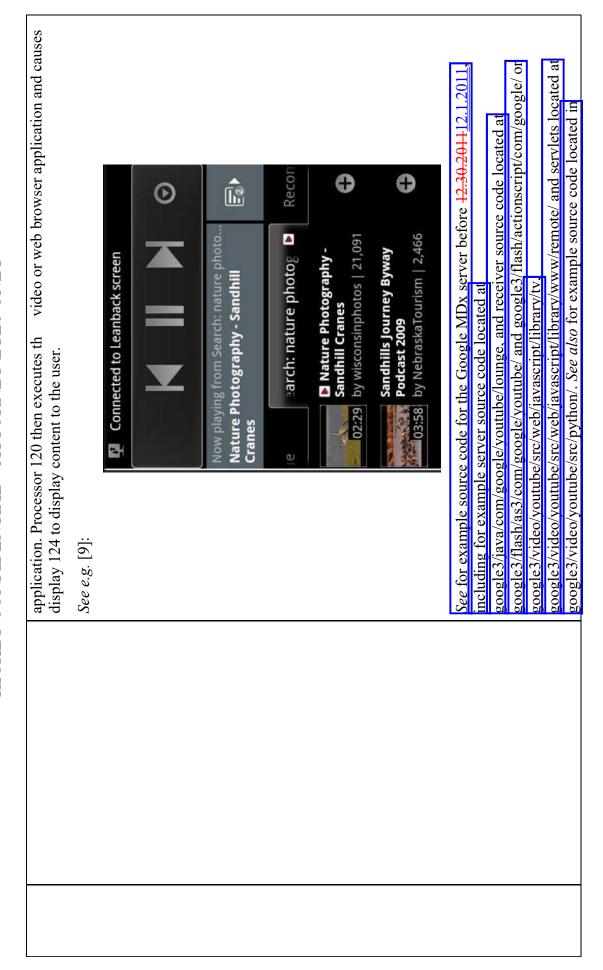
The user's YT account includes playlists or channels, with videos automatically added to the user's feed. The playlist or channel comprise multimedia content added to a queue, which is accessed on the leanback screen. "When you search, your results end up in a channel and as soon as you finish playing one video, youtube leanback automatically plays the rest in sequence" (https://blog.youtube/news-and-events/youtube-leanback-offers-

effortless?m=1https://blog.youtube/news-and-events/youtube-leanback-offers-effortless?m=1)
"Your feed is personalized to you, based on your youtube preferences and once one video ends, the next automatically begins" (https://blog.youtube/news-and-events/youtube-leanback-offers-effortless?m=lhttps://blog.youtube/news-and-events/youtube-leanback-offers-effortless?m=1)
See e.g. [7] Remote to Server, Remote to Screen, Screen to Server and Server to Screen:
For a lounge session there is only one playlist being played, the 'Now playing' list. The server keeps track of the playlist
Remote to Server messages
setPlaylist(videolds, videold, currentTime)         Ndeolds - comma separated video id values representing the current playlist current that the current playlist currentTime - playback position in the video in seconds videold - id of the video currently playing, must be part of the playlist
The remote informs the server what its current playlist is Server what its current playlist is Server what its current playlist is the session, the playlist sent by the remote will become the current playlist. If there already is one, the playlist will be ignored. The server will also
send a request for nowPlaying to the screen.
addVideo(videold) insertVideo(videold) addVideos(videolds)
moveVideo(videold, delta) removeVideo(videold) clearPlaylist()
These messages change the current playlist on the server. If a change occurs, the server will bend updates to the remotes (via playlistModffied) and to the screen (via updatePlaylist).

Server to Screen messages
setPlaylist(videolds, currentIndex, currentTime)    Videolds - comma separated video id values representing the current playlist     SurrentTime - playback position in the video in seconds     SurrentTime - playback position in the video in seconds     SurrentIndex- index of the video currently playing
Sets the playlist from the screen and starts playing the current video from the urrent time. If current video is not present will play the first video in the list. Should no
other message come from the remote, the screen autoplays the videos in the list
updatePlaylist(videolds)    Mdeolds - comma separated video id values representing the current playlist
Updates the current playlist. The currently playing video must be in videos
getPlaylist() The server makes a request to the screen to send its current playlist.
getNowPlaying() The server makes a request to the screen to send a now playing message.



#### instructions associated with a video application or web browser for displaying video content between controlled device 118 and one or more servers associated with a network. Network control, such as remote control 14 shown in FIG. 1, remote controls 62 shown in FIG. 2, or module 136 is configured to transmit data/requests to and receive data/responses from one or more servers via network. Network module 136 may provide received data to processor module may 100 may communicate with one or more servers associated with the network remote control 75 shown in FIG. 3. For example, storage device 92 may store application according to a network communication protocol, such as, for example, hypertext transfer from the World Wide Web (e.g., YouTube® content, Hulu® content, Netflix® content, communication, and includes appropriate hardware and software to provide wireless or require data from one or more of servers, such as servers 24 shown in FIG. 1. Network modulators, demodulators, amplifiers, and other circuitry to effectuate communication In some examples, any application of applications 130 executed by processor 132 may etc.). A user may interact with user interface 120 to execute the video or web browser Controlled device 118 may be used, in some examples, in conjunction with a remote wired communication. For example, network module 136 may include an antenna, 132 for further processing. Network module 136 may support wireless or wired protocol (HTTP), HTTP secured by transport layer security or secure sockets This message is intercepted by the server. The server sets a confirmation timer for the This method is used as a fallback, if the remote does not know the current playstate This method is used as a fallback, if the remote does not know the current playstate ounge session and if it does not receive a nowPlaying message from the screer containing the videold it will send a setPlaylist message to the screer See e.g. [8] at Fig. 4 and 12:50-65: Otherwise, it would use setVideo Remote to Screen messages setVideo (videold, currentTime) See e.g. [8] at 13:4-15: next() prevo



not limited to a list of multimedia items selected by the user for playback and need not have he UPDATE PLAYLIST message each time the party queue is modified by a host or guest videoIds in the party queue) and uses the obtained data to retrieve at least one media item in he remote playback queue from Google's Bandaid CDN servers which is then played back. multimedia content selected for playback." The Court indicated that a "playback queue" is "party queue" is a "remote playback queue" and the YouTube Remote system satisfies this btain data identifying a next one or more media items that are in the party queue (e.g., the Sonos's interpretation of "remote" and "the instruction," the YT Remote System's shared his limitation by sending a SET PLAYLIST message or UPDATE PLAYLIST message PARTY PLAYLIST message, which The SET PLAYLIST message contains the party queue (and this process is repeated with Thus, at least under Sonos's interpretation, the YouTube Remote system satisfies Further, on August 2, 2022, this Court construed the term "playback queue" as "a list of SET VIDEO message to the one or more selected playback devices (YouTube screens) multiple media items. At least under the Court's construction of "playback queue" and hat configures the playback device to communicate with the Lounge server in order to This function causes the subdirectories YTTV<sup>\$43</sup>/modules/leanback and YTTV/application. YTTVF/net/browserchannel/, YTTVF/youtube/, google3/yideo/youtube/src/python/. ounge servers (cloud-based computing system) to send a SET PLAYLIST and a google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ causes the Lounge server to call sendPartyQueueToScreen. See also for example source code located in subdirectories 200gle3/video/youtube/src/web/javascript/library/www/ google3/video/youtube/src/web/javascript/library/tv/ for example, the Lounge servers receives the SET See also e.g.: YTTV/modules/leanback; YTTV/application imitation. iser).

543 Throughout, "YTTV" refers to

google3/flash/as3/com/google/youtubeYTTVLeanback1202011/google3/flash/as3/com/google/youtube/

nedia items that are in the remote plavback queue (e.g., streaming/bandaid URLs and video lata), and uses the obtained data to retrieve at least one media item in the remote playback ssociated with the Player service) in order to obtain data identifying a next one or more queue from the cloud-based media service (Google's Bandaid CDN) that is then played Alternatively, a SET PLAYLIST or UPDATE PLAYLIST message configures the playback device to communicate with the YouTube back-end servers (e.g., servers oack.

SET PLAYLIST message to not include the videolds in the party queue and instead trigger urther, while the YouTube Remote system's SET PLAYLIST message includes within i he playback device to retrieve those videolds in a separate message (rather than as part of he same message). The remainder of the flow would remain the same, with the videoIds being used to retrieve at least one media item in the remote playback queue from the he videolds for the party queue, it would have also been at least obvious for the Sandaid CDN and play back the retrieved at least one media item.

See, e.g., [12]:

#### Party Mode

together. All members of the party can add/reorder/delete videos to the same 'Shared Queue' of Party mode allows multiple users to connect to the same screen, queue up and watch videos videos, which is being played on the Leanback screen. It basically solves this problem http://xkcd.com/920/

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"ve designed and implemented the shared queue management (both android app and server) cl/18357652 cl/18343670

Redesigned the party mode initialization to be invitation based: cl/18677970, cl/18636464

Launched in the version 2 of the remote.

have at least been obvious to combine these references with the references cited in Riders I-To the extent it is argued that these references do not disclose this claim element, it would J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.

responsibility for the remote playback transferred from the computing device detecting an indication that playback to the at least one given playback queue has been successfully device; and



See e.g. [8] at 5:29-41:

remote control 14 and controlled device 18, and include, for example, playback information Controls 30 may depend on the capability of remote control 14 or controlled device 18, and In the example shown in FIG. 1, remote control 14 includes a user interface 26 that may be content, etc. The type and quantity of information 34 may also depend on the capability of used to present information to a user. For example, user interface 26 may display controls Such as time remaining of content, playlist information, content rating information, etc.). include, for example, fast forward, reverse, skip ahead or back, play, stop, move to new 30 and information 34 associated with content being played on controlled device 18.

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#### See [8] e.g. at 5:42-63:

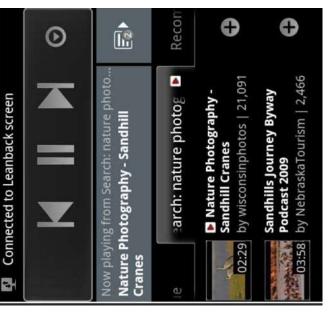
to network 14. For example, controlled device 18 may be configured to initiate contact with Internet-connected television that is configured to receive signals from and transmit signals servers 24. For example, controlled device 18 may notify servers 24 that controlled device Controlled device 18 may include a variety of network enabled devices, such as a network enabled television, set top box, personal video recorder, or other device capable of being 18 is connected to network 22. Controlled device 18 may notify servers 24, for example, network-connected and controlled remotely. In an example, controlled device 18 is an

Filed 09/04/23

# HIGHLY CONFIDENTIAL – ATTORNEY EYES ONLY

device 18, which can be used by servers 24 to pair controlled device 18 with remote control 14. The message may also contain notification or content data for updating a user interface account maintained by the servers 24 using controlled device 18, thereby notifying servers 24 that controlled device 18 is connected to network 22. Controlled device 18 can also be of remote control (e.g., indicating completion of a task, such as completing playback of configured to transmit a message to servers 24 of network 22 that identifies controlled automatically upon being powered on. In another example, a user may log in to a user content).

See e.g. [9]:



ncluding for example source code located at YTR/src/com/google/android/vtremote/, and YTR/res/. See also for example source code located in subdirectories YTR/res/values and See for example source code for the Android application before 12.30.201112.1.201 YTR/src/com/google/android/ytremote, and YTTVF/youtube/, YTTVF/net/browserchannel/.

		See also for example source code located in subdirectories google3/video/youtube/src/web/javascript/library/tv/.
		See also e.g.: YTR/res/values; YTR/src/com/google/android/ytremote.
		Further, on August 2, 2022, this Court construed the term "playback queue" as "a list of
		multimedia content selected for playback." The Court indicated that a "playback queue" is
		not limited to a list of multimedia items selected by the user for playback and need not have multiple media items. At least under the Court's construction of "playback anene" and
		Sonos's interpretation of "remote," the YT Remote System's shared "party queue" is a
		"remote playback queue." Thus, under the Court's construction and Sonos's interpretation,
		a YouTube Remote application with party mode discloses and renders obvious detecting an
		indication that playback responsibility for the remote playback queue has been successfully
		transferred from the computing device to the at least one given playback device and stops
		local playback and updates the UI. See Bhatachariee Decl., ¶134, 143 158 (discussing
		"loungeScreenConnected" and "Screen Connected" messages and stopping of video).44
		To the extent it is argued that these references do not disclose this claim element, it would
		have at least been obvious to combine these references with the references cited in Riders I-
		J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1g]	after detecting the indication,	The YT Remote System discloses after detecting the indication, transitioning from i) the
	transitioning from i) the first mode in	first mode in which the computing device is configured for playback of the remote playback
	which the computing device is	queue to ii) a second mode in which the computing device is configured to control the at
	configured for playback of the remote	least one given playback device's playback of the remote playback queue and the computing
	playback queue to ii) a second mode	device is no longer configured for playback of the remote playback queue.
	in which the computing device is	
	configured to control the at least one	See e.g. [4] the user's phone (the control device) allows the user to press pause or play on
	given playback device's playback of	the phone and the leanback screen in turns pauses or plays the video:
	the remote playback queue and the	
	computing device is no longer	

<sup>44</sup> See also, e.g., ytremote\WatchActivity.java at 205-219, 1158-1196.

configured for playback of the remote playback queue.



#### See e.g. [5]

YouTube Remote is a simple but effective remote tool for controlling YouTube Leanback from the comfort of your Android device. One of the best features of YouTube Remote is that it isn't just a remote control device for YouTube Leanback, it's also a compact YouTube viewer. You can, for example, preview a video on your Android device before kicking it video to play on the big screen you can then turn off the remote function and over to the playlist for your monitor or television. Once you've queued up a continue to preview and add more videos to the queue.

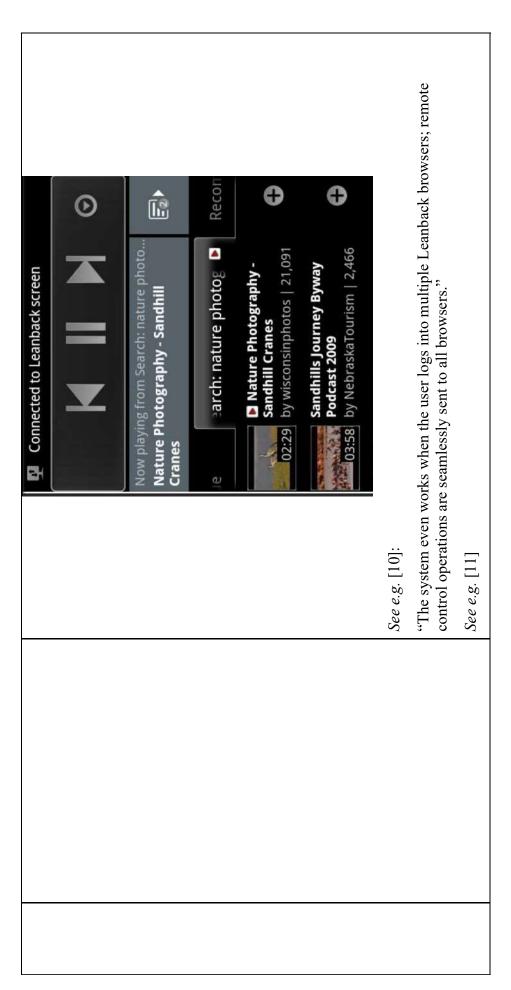
Filed 09/04/23

#### See e.g. [8] at 5:29-41:

Controls 30 may depend on the capability of remote control 14 or controlled device 18, and In the example shown in FIG. 1, remote control 14 includes a user interface 26 that may be content, etc. The type and quantity of information 34 may also depend on the capability of used to present information to a user. For example, user interface 26 may display controls include, for example, fast forward, reverse, skip ahead or back, play, stop, move to new 30 and information 34 associated with content being played on controlled device 18.

transmits a message to the indeed recipients (one or more remote controls 14) of the content remote control 14 and controlled device 18, and include, for example, playback information process and/or repackage the content information of the message from controlled device 18 into a new message, which can be sent to the intended recipients of the content information. session. In addition, the message may contain content information intended to notify a user of an event regarding controlled device 18, or to prompt a user of remote control 14 to take information (258). In Some examples, server 24 forwards the content information from the disclosure. For purposes of illustration only, the method of FIG. 9 is described with respect be utilized to implement or perform the method shown in FIG. 9. In some examples, server device 18, server 24 retrieves a remote control identifier that identifies one or more remote query a database of stored identification numbers to deter mine which remote control 14 is first message directly to one or more remote controls 14. In other examples, server 24 may controls 14 intended to receive the content information (224). For example, server 24 may to networked environment 10 of FIG. 1, though various other systems and/or devices may 24 receives a message from controlled device 18 having a controlled device identifier and contain an SID issued by servers 24 that identifies controlled device 18 as being part of a update a user interface of remote control 14. After receiving the message from controlled Such as time remaining of content, playlist information, content rating information, etc.). an action (e.g., notification that playback has stopped, notification that playback of new content has begun, and the like). The content information may be used, for example, to associated with the session that includes the remote control identifier. Server 24 then content information (250). For example, the message from controlled device 18 may communicating with a network server, in accordance with one aspect of the present FIG. 9 is a flowchart illustrating an example operation of a controlled device See e.g. [8] at 18:55-19:22:

See e.g. [9]



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Indate. Once we not everything rolling we were able to not a hotter imprecsion of
the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it
worked smoothly, scrolling side to side through various queues of types of content
and our favorites list. While the task of pulling up Leanback in a browser window or
even on a Google TV device makes it ill-suited for viewing just one video at a time,
where it excels is building a up a queue of videos and sending them over all at once.
It will work on multiple screens at the same time as well, but there's no Airplay-
style syncing to be had, if one of them starts to slow down or buffer it will simply
continue lagging behind, and without any volume controls or ability to reach other
functions, you'll still need to keep other remotes handy.
See for example Google source code referenced in elements [1pre]-[1f] above. See also for
example source code located in subdirectories YTR/src/com/google/android/ytremote, and
google 3/video/vonthihe/src/weh/javascrint/library/ty/
google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/
See also e.g.: YTR/src/com/google/android/ytremote/adapter;
YTR/src/com/google/android/ytremote:
YTR/src/com/google/android/ytremote/backend/browserchannel;
YTR/src/com/google/android/ytremote/backend
Further, on August 2, 2022, this Court construed the term "playback queue" as "a list of
multimedia content selected for playback." The Court indicated that a "playback queue" is
not limited to a list of multimedia items selected by the user for playback and need not have
multiple media items. At least under the Court's construction of "playback queue" and
Sonos's interpretation of "remote," the YT Remote System's shared "party queue" is a
"remote playback queue." Thus, under the Court's construction and Sonos's interpretation,
a YouTube Remote application with party mode discloses or renders obvious detecting the
indication, transitioning from i) the first mode in which the computing device is configured
for playback of the remote playback queue to ii) a second mode in which the computing
device is configured to control the at least one given playback device's playback of the
remote playback queue (the YouTube Remote application can control playback of the party
playlist on the YouTube screens) and the computing device is no longer configured for
playback of the remote playback queue (playback on the YouTube Remote application

		stops). See Bhatacharjee Decl., ¶¶134, 143 158 (discussing "loungeScreenConnected" and "Screen Connected" messages and stopping of video). <sup>45</sup>
		To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[2]	The computing device of claim 1, wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service.	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System includes the instruction comprising an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service.

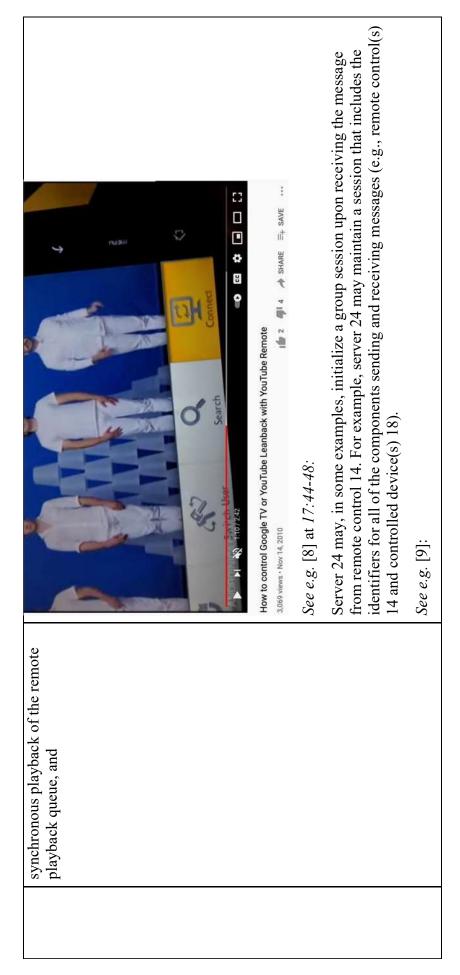
45 See also, e.g., ptremote\WatchActivity.java at 205-219, 1158-1196.

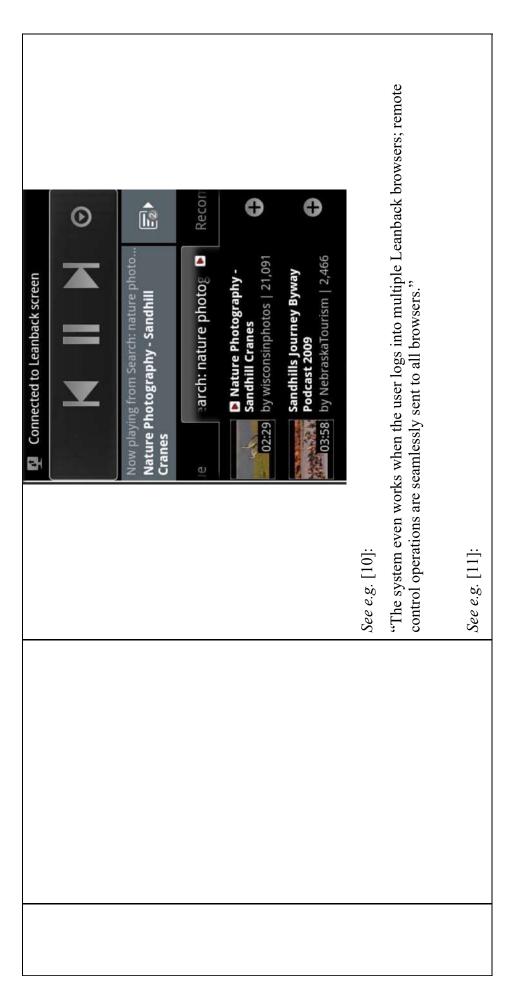
|--|

Screen to Server messages
nowPlaying(video id, current time    video id - the encrypted video Id of the currently playing video   current time - playback position in the video   current time - playback position   curr
Leanback informs the server what the currently playing video is. The screen sends this message after any video data change event (such as on next, on previous, or when the next video auto-plays).  The server will forward this message to all remotes in the session. If the video id is not found in the current server playlist, the server will issue a getPlaylist() message to the screer.
<ul> <li>bnStateChange(state)</li> <li>state - the new video player state: unstarted (-1), ended (0), playing (1), paused</li> <li>buffering (3), video cued (5)</li> </ul>
mplemented via the our player's JS API, when we receive a onStateChange event we relay that information to the remotes.
confirmPlayistUpdate(updated] I
As a response to updatePlaylist, confirms whether the playlist was updated or not; if could be rejected if the playing video is not part of the playlist being sen
See e.g. [8] at 17:21-43: In some examples, server 24 receives a message from remote control 14 having a remote control identifier and control information (220). For example, the message from remote control 14 may contain an SID issued by servers 24 that identifies remote control 14 as
being part of a session. In addition, the message may contain control information intended to alter the operation of one or more controlled devices 18 (e.g., stop playback, begin next
payback item, etc.). After receiving the message from remote control 14, server 24 retrieves a controlled device identifier that identifies one or more controlled devices 18 intended to
receive the control information (224). For example, server 24 may query a database of stored identification numbers to determine which controlled device is associated with the
session that includes the remote control identifier. Server 24 then transmits a message to the
intended recipients (one or more controlled devices 18) of the control information (228). In
some examples, server 24 forward the control information from the first message directly to one or more controlled devices 18. In other examples, server 24 may process and/or

		repackage the control information of the message from remote control 14 into a new message, which can be sent to the intended recipients of the control information.
		See for example Google source code referenced in elements [1pre]-[1g] above. See also for example source code located in subdirectories YTR/src/com/google/android/ytremote/, YTL/browserchannel, YTL/model and YTTV/modules/leanback. YTTVF/youtube/.
		google3/video/youtube/src/python/, YTTVF/net/browserchannel/, and google3/video/youtube/src/web/javascript/library/tv/,
		google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/
		See also e.g.: YTR/src/com/google/android/ytremote/backend/model: YTR/src/com/google/android/ytremote; YTL/browserchannel; YTL/model; YTTV/modules/leanback.
		Further, at least under the Court's construction of "playback queue" and Sonos's interpretation of "remote," the YT Remote System's shared "party queue" is a "remote playback queue." Thus, under the Court's construction and Sonos's interpretation, a YouTube Remote application with party mode performs this limitation for the same reasons
		discussed in Limitation 1 d - 1 e.
		To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-  J. Further discussion of the obviousness of this claim element is provided in Google's
		Invalunty Contentions Cover Fleading.
[4a]	The computing device of claim 1, wherein the representation of the one	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System includes the representation of the one or more playback devices
	or more playback devices comprises at least one selectable indicator for a	comprises at reast one selectable indicator for a group of playback devices that are to be configured for given playback devices that are to be configured for
	group of playback devices that	synchronous playback of the remote playback queue.
	includes the given playback device and one or more other playback	See e.g. [4]:
	devices that are to be configured for	

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		<b>Update</b> : Once we got everything rolling, we were able to get a better impression of
		the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it
		worked smoothly, scrolling side to side through various queues of types of content
		and our favorites list. While the task of pulling up Leanback in a browser window or
		even on a Google TV device makes it ill-suited for viewing just one video at a time,
		where it excels is building a up a queue of videos and sending them over all at once.
		It will work on multiple screens at the same time as well, but there's no Airplay-
		style syncing to be had, if one of them starts to slow down or buffer it will simply
		continue lagging behind, and without any volume controls or ability to reach other
		functions, you'll still need to keep other remotes handy.
		See for example Google source code referenced in elements [1pre]-[1f] above. See also for
		example source code located in subdirectories YTR/src/com/google/android/ytremote/,
		google3/video/voutube/src/web/javascript/library/www/remote/
		See also e.g.: YTR/src/com/google/android/ytremote/adapter:
		Y I K/src/com/google/android/ytremote; Y I L/browserchannel.; * I L/model to the extent it is aroued that these references do not disclose this claim element, it would have at least
		been obvious to combine these references with the references cited in Riders J.K. Further
		discussion of the obviousness of this claim element is provided in Google's Invalidity
		Contentions Cover Pleading YTL/model To the extent it is argued that the "connect" button
		is not is not the claimed "representation of one or more playback devices in a media
		playback system" and that a "device-picker" is required, this limitation is anticipated if
		Sonos is not entitled to its July 15, 2011 invention date because Google implemented the
		device-picker in its December 30, 2011 source code and released it no later than January of
		2012 in Version 3 of the YouTube Remote. Bhatacharjee Decl., \$\( \psi \) 170. To the extent Sonos
		is entitled to its July 15, 2011 invention date, this limitation is at least obvious in view of
		one or more of the YouTube Remote Patent's disclosure of a device-picker, Google's
		Tungsten/Nexus Q device with device-picker, Apple Airplay, Sonos's own prior art, and/or
		the Al-Shayk patent. Bhatacharjee Decl., ¶ 27-34, 165-174. Indeed, the Court's August 2,
		2022 Order concluded that it would have been obvious to add the device-picker to the
		YouTube Remote application. Dkt. No. 316 at 14-17.
[4b]	wherein the user input indicating the	See element [4a] above.
	sciection of at least one given	( L

	playback device from the one or more playback devices comprises user input	See also for example source code located in subdirectories  YTR/src/com/google/android/ytremote/, YTR/src/com/google/android/apps/ytlounge/res/,
	playback devices.	YTR/src/com/google/android/ytremote/backend
		<i>See also e.g.</i> : YTR/src/com/google/android/vtremote/adanter:
		YTR/src/com/google/android/ytremote;
		YTR/src/com/google/android/apps/ytlounge/res/drawable-hdpi: YTR/src/com/google/android/apps/ytlounge/res/drawable-mdpi;
		YTR/src/com/google/android/apps/ytlounge/res/drawable;
		YTR/src/com/google/android/youtube/ui;
		YTR/src/com/google/android/ytremote/backend/browserchannel;
		YTR/src/com/google/android/ytremote/backend.
[6]	The computing device of claim 8, wherein the transport control operation comprises one of a play	The disclosures in the independent claim are hereby incorporated by reference. In addition, YT Remote System discloses the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.
	operation, a pause operation, a skip forward operation, or a skip back operation.	See e.g. claim element [1.g] above.
[11]	The computing device of claim 1, wherein displaying the representation	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System includes displaying the representation of the one or more playback
	comprises:	response to receiving a selection of a displayed icon indicating that playback responsibility
	displaying the representation of the one or more playback devices in	for the remote playback queue can be transferred.
	response to receiving a selection of a	

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<u>4</u>

See e.g.

displayed icon indicating that playback responsibility for the remote playback queue can be transferred.



3,069 views · Nov 14, 2010 See e.g. [8] at 4:4-20:

other. The network service can then route messages to members of the session. Any number controlled device a unique identifier. When pairing devices, the network service may utilize and multiple controlled devices associated with a single user, the user may identify a Subset According to some examples, the network service may assign each remote control and each may be paired to any number of controlled devices. When pairing multiple remote controls For example, the network service may initiate a session that includes each unique identifier the unique identifier associated with each device to route communication signals properly. of remote controls may be paired with a single controlled device and one remote control of remote controls and controlled devices that are authorized to communicate with each of the remote controls as paired to a subset of the controlled devices, and manage which remote controls control which controlled devices.

See for example Google source code referenced in elements [1pre]-[1f] above.

See also for example source code located in subdirectories

YTR/src/com/google/android/ytremote/, YTR/res/drawable-mdpi, YTR/res/menu, and YTR/src/com/google/android/ytremote/factory, and

		google3/video/youtube/src/web/javascript/library/tv/.google3/video/youtube/src/web/javascript/library/www/.
		See also e.g.: YTR/src/com/google/android/ytremote/adapter;
		YTR/src/com/google/android/ytremote; YTR/src/com/google/android/ytremote:
		YTR/res/drawable-mdpi: YTR/res/menu; YTR/src/com/google/android/ytremote/factory; YTR/src/com/google/android/ytremote.
		To the extent it is argued that these references do not disclose this claim element, it would
		have at least been obvious to combine these references with the references cited in Rider J.
		Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading. To the extent it is argued that the "connect" button
		does not satisfy the claims and that a "device-picker" is required, this limitation is
		anticipated if Sonos is not entitled to its July 15, 2011 invention date because Google
		implemented the device-picker in its December 30, 2011 source code and released it no
		ater than January of 2012 in Version 3 of the YouTube Remote. Bhatacharjee Decl., \$170.
		obvious in view of one or more of the YouTube Remote Patent's disclosure of a device-
		picker, Google's Tungsten/Nexus Q device with device-picker, Apple Airplay, Sonos's own
		prior art, and/or the Al-Shayk patent. Bhatacharjee Decl., ¶¶ 27-34, 165-174. Indeed, the
		Court's August 2, 2022 Order concluded that it would have been obvious to add the device-
		picker to the YouTube Remote application. Dkt. No. 316 at 14-17.
[12pre]	A non-transitory computer-readable medium having stored thereon	The disclosures in independent claim [1] are hereby incorporated by reference. See e.g. claim element [1 pre] above.
	program instructions that, when	
	executed by at least one processor,	
	cause a computing device to perform	
	runctions comprising:	
[12a]	operating in a first mode in which the	The disclosures in independent claim [1] are hereby incorporated by reference. See e.g.
	computing device is configured for	claim element [1a] above.
	piayoack of a remote piayoack queue	

	provided by a cloud-based computing system associated with a cloud-based	
[12b]	while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback	The disclosures in independent claim [1] are hereby incorporated by reference. See e.g. claim element [1b] above.
[12c]	while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices;	The disclosures in independent claim [1] are hereby incorporated by reference. See e.g. claim element [1c] above.
[12d]	based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue from the in the remote playback queue from the cloud-based media service; and (iii)	The disclosures in independent claim [1] are hereby incorporated by reference. See e.g. claim element [1d] and [1e] above.

	play back the retrieved at least one media item:	
[12e]	detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device; and	The disclosures in independent claim [1] are hereby incorporated by reference. See e.g. claim element [1f] above.
[12f]	after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue.	The disclosures in independent claim [1] are hereby incorporated by reference. See e.g. claim element [1g] above.
[13]	The non-transitory computer-readable medium of claim 12, wherein the instruction comprises an instruction for the cloud-based computing system associated with the cloud-based media service to provide the data identifying the next one or more media items to the given playback device for use in obtaining the at least one media item from the cloud-based computing system associated with the cloudbased media service.	See claim [2] above.

[16]	The computing device of claim 1, further comprising program instructions stored on the nontransitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising:	The computing device of claim 1, further comprising program further comprising program further comprising program instructions stored on the non-transitory computer-readable medium to before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to perform functions comprising:  [1b] above.
	before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue.	